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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, MERILYN P	

ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/888,166	LIN ET AL.	
	Examiner	Art Unit	
	Merilyn P. Nguyen	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 25 June 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 09/10/01&03/17/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: Detailed Action.

DETAILED ACTION

1. Claims 1-27 are pending in this office action.

Title

2. The title of the invention is objected to because the title is too long. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 8, 14 and 21, these claims are being incomplete because the body of the claim does not support the preamble such as no steps are given to arrive with method of data replication. Also, the step "sending" is not connected to step "reading".

Claims 1-27 contain the trademark/trade name ISAM. Claims 5, 11, 18 and 25 contain the trademark/trade name PROMIS. Claims 7, 13, 20 and 27 contain the trademark/trade name Oracle and Microsoft Visual Basic/Access. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218

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USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe database and system and, accordingly, the identification/description is indefinite.

Regarding claims 14 and 21, lines 4, the limitation of "the ISAM database comprising: polling means...; reading means...; sending means...;" renders the claim indefinite because a database can't contain polling and reading and sending means.

Regarding claims 15 and 22, there is insufficient antecedent basis for "two or more data replication server". This contradicts with "at least one data replication server" recited in claim 14 and 21. Also, there is insufficient antecedent basis for "at least one relational database".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 6, 8, 12, 14-15, 19, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher (US 6,247,128), in view of Dingman (US 6,795,868).

Regarding claim 1, Fisher discloses a computer-based method of data replication of data in a Programmable computer system having an database (database 602, Fig. 6) and a transaction log file (See page 12, lines 62-63, "audit log"); the database having fields of tables and the transaction log file maintaining all files transactions of the database; comprising the steps of:

- polling the transaction log file for file transactions of at least one selected database fields of tables (See col. 27, lines 12-15) by at least one data replication server; (See col. 9, lines 51-57).
- reading the polled file transactions of the at least one selected database fields of tables (See col. 27, lines 12-16)by the at least one data replication server (See col. 9, lines 51-57); and
- sending the polled file transactions of the at least one selected database fields of tables from the at least one data replication server to at least one relational database (See col. 27, lines 16-21, wherein CCP databases at the remote manufacturing site 112 are relational database (See col. 12, lines 14-65);

whereby the polled file transactions of the at least one selected database fields of tables sent to the at least one relational database is accessible in real time (by using sql query tool, See col. 9, lines 65-67).

Fisher is silent as to the database is an ISAM database. On the other hand, Dingman teaches an ISAM database as a source database for data transformation (See col. 6, lines 1-2, and col. 35, claim 5, Dingman et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate the ISAM database into the database of Fisher. The motivation would have been to having the index database for easily accessible in real time.

Regarding claims 2, 8, 15 and 22, Fisher/Dingman discloses wherein the polled file transactions of the at least one selected database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database connections (See col. 32, lines 20-25, Fisher et al.).

Regarding claims 6, 12, 19, and 26, Fisher/Dingman discloses whereby the polled file transactions of the at least one selected database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools (See col. 9, lines 65-67, Fisher et al.).

Regarding claims 14 and 21, Fisher/Dingman discloses a database processing computer-based system (See Figs. 4 and 6) having polling means, reading means and sending means for polling, reading and sending steps of claims 1 and 8 (See col. 27, lines 8-21 as DBMS (means) accessing and using transaction logs for replicate changes to CCP remote databases, Fisher et al.).

5. Claims 3-5, 7, 9-11, 13, 16-18, 20, 23-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher (US 6,247,128), in view of Dingman (US 6,795,868), and further in view of Applicant's Admitted Prior Art.

Regarding claims 3, 4, 9, 10, 16-17 and 23-24, Fisher/Dingman discloses the polled file transactions of the at least one selected database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database

connections (See col. 32, lines 20-25, Fisher et al.); However, Fisher is silent as to the at least one relational database being relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing SQL NET protocol. Applicant admits that an EDA relational database, a MES relational database and SQL NET protocol was known at the time the invention was made. Since an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing SQL NET protocol was readily available, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the well known EDA relational database, MES relational database as disclosed by Applicant's Admitted Prior Art as the relational database of Fisher and utilized SQL NET protocol to update EDA/MES relational database. The resultant use of the EDA relational database, the MES relational database and SQL NET protocol would have performed the intended (by Fisher) function, without undue experimentation and with expected and obvious result (See applicant's specification, page 8, last paragraph, line 6 to page 9, "the relational database connections 26...respectively").

Regarding claims 5, 11, 18 and 25, Fisher/Dingman discloses all the claim subject matter as set forth above. However, Fisher/Dingman is silent as to wherein the system having an ISAM database and a transaction log file is a PROMIS system. Applicant admits that a PROMIS system is generally used as an example ISAM database system and was known at the time the invention was made. Since the PROMIS system was readily available, it would have been

obvious to one having ordinary skill in the art at the time of the invention was made to use the well known PROMIS system disclosed by Applicant's Admitted Prior Art as the system having an ISAM database and a transaction log file. The resultant use of the PROMIS system would have performed the intended (by Fisher/Dingman) function, without undue experimentation and with expected and obvious result (See applicant's specification, page 8, first paragraph).

Regarding claims 7, 13, 20 and 27, Fisher/Dingman discloses all the claim subject matter as set forth above. However, Fisher/Dingman is silent as to the SQL query tools being selected from the group consisting of Oracle SQL/PLUS and Microsoft Visual Basic/AccessTM. Applicant admits that the SQL query tools being selected from the group consisting of Oracle SQL/PLUS and Microsoft Visual Basic/AccessTM was known at the time the invention was made. Since the SQL query tools being selected from the group consisting of Oracle SQL/PLUS and Microsoft Visual Basic/AccessTM was readily available, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the well known Oracle SQL/PLUS and Microsoft Visual Basic/AccessTM disclosed by Applicant's Admitted Prior Art as the SQL query tools of Fisher/Dingman. The resultant use of the Oracle SQL/PLUS and Microsoft Visual Basic/AccessTM would have performed the intended (by Fisher/Dingman) function, without undue experimentation and with expected and obvious result (See applicant's specification, page 2, second paragraph).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mosher U.S Patent No. 5,884,328 discloses system and method for synchronizing a large database and its replica.

Gostanian U.S Patent No. 5,781,910 discloses performing concurrent transactions in a replicated database environment.

McCargar U.S Patent No. 6,014,674 discloses method for maintaining log compatibility in database systems.

Strickler U.S Patent No. 6,122,630 discloses bidirectional database replication scheme for controlling ping-ponging.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026. The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Frantz Coby
FRANTZ COBY
PRIMARY EXAMINER
10/27/05